

APPENDIX B
CLAIMS UNDER EXAMINATION

2. (once amended) An isolated nucleic acid comprising a polynucleotide sequence associated with the senescence of a cell, wherein the sequence has at least 85% sequence identity with SEQ ID NO:1.
3. (once amended) The isolated nucleic acid of claim 2 wherein the sequence has at least 95% sequence identity with SEQ ID NO:1.
7. (previously twice amended) An isolated nucleic acid comprising a polynucleotide sequence associated with the senescence of a cell, wherein said polynucleotide sequence hybridizes to a nucleic acid having a sequence as set forth in SEQ ID NO:1 under stringent conditions, which comprise hybridization in a solution comprising 50% formamide at 42°C and washing in a solution comprising 0.2x SSC wash at 65°C.
9. (once amended) An isolated nucleic acid comprising a polynucleotide sequence associated with G0-arrested cells, wherein the sequence has at least 85% sequence identity with SEQ ID NO:2.
10. (once amended) The isolated nucleic acid of claim 9 wherein the sequence has at least 95% sequence identity with SEQ ID NO:2.
29. (twice amended) A kit for detecting whether a cell is undergoing senescence, said kit comprising:
 - a probe which comprises a polynucleotide sequence selected from the group consisting of SEQ ID NO:1, 2, 37, 61, 67, 69, 70, and 73; and
 - a label for detecting the presence of said probe.

31. (twice amended) The kit in accordance with claim 29 further comprising a plurality of probes each comprising a polynucleotide sequence independently selected from the group consisting of SEQ ID NO:1, 2, 37, 61, 67, 69, 70, and 73; and
a label for detecting the presence of said plurality of probes.

32. (as filed) The kit in accordance with claim 31 wherein said probes are immobilized on a solid support.

33. (as filed) The kit in accordance with claim 29 wherein said solid support is a chip.